Department of Natural Resources and Conservation

Agency Information Technology Performance Report
2017 Biennial Report

Please complete this report by close of business October 25, 2016.
Please upload your final Performance Report and all applicable spreadsheets to your individual Agency folder in the Biennial Reporting SharePoint Site found at:
https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.

MCA 2-17-521(4) requires the Department of Administration to prepare a biennial report on Information Technology (IT) based on the Agency IT Plans and Performance Reports required under MCA 2-17-524.

This performance report evaluates progress made towards the objectives articulated in your 2014 Agency IT Plan, which can be found at:
https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.

Please answer each section below based on your 2014 Agency IT Plan (*add lines to the tables as needed*).

Section 1: An evaluation of the Agency's performance relating to IT (MCA 2-17-524(3)(a)).
- Referencing the goals and objectives noted in Section 10 of your 2014 Agency IT plan, please fill in the table below with the information for each goal and objective.
    - o 2014 Agency IT plans can be found in your Agency folder located at https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.
- Please provide an update on the efforts to implement your Agency 2014 IT goals and objectives. Your update may include how a goal/objective has advanced the Agency mission.

GOAL	UPDATE
Executive Goal - Improve network capacity and performance at DNRC sites	Bandwidth has been upgraded to every DNRC office where it was possible to do so based on number of users, devices, cost, and technical availability.
Executive Goal - Ensure critical data and systems meet program requirements for disaster recovery and continuity of service	DR and Continuity capabilities have been developed with redundancy to repurposed DNRC gear in the Miles City Data Center.
Executive Goal - Deliver web and mobile access to DNRC services for citizens, businesses, and employees	DNRC deployed a new website, new intranet site, social media feeds, Facebook site, and is working on mobile applications for data field collection for staff.
Executive Goal - Implement an agency cyber security program	Program has been initiated and is in early stages of development.
IT & Program Specific Goals: (see following)	

IT Goal 1 - Develop DNRC-wide applications and shared data infrastructure that meet agency business requirements, reduce cost, improve efficiency of operations, and enhance security of information assets.	DNRC upgraded its hardware to support the maturation of our IT infrastructure, now supporting over 92 virtual servers and over 120 databases at very cost effective rates. DNRC upgraded numerous legacy systems to SQL Server database systems as part of the Windows 7 upgrade in 2014. A number of DNRC programs have had critical information scanned into digital form, with more still to do. DNRC rolled out a new Performance Management System, and is completing its second year on the new system. DNRC is constantly improving and expanding our mobile capabilities, particularly in the field work force. DNRC implemented the enterprise solution of AirWatch.
IT Goal 2 - Expand agency information available over the Internet and expand access to Egovernment services for DNRC.	DNRC conducted successful internal projects to upgrade both the external and internal websites, including a new responsive design on a content management system that allows programs to update their pages according to business need. DNRC also upgraded the online nursery application and developed the initial version of the Sage Grouse project reporting site. Finally, DNRC now has both a Twitter and Facebook account used to communicate information to the public.

IT Goal 3 DNRC Enterprise GIS development	DNRC has migrated the GIS server environment to DNRC architecture after the discontinuation of services from SITSD according to our departmental business need, particularly a continued to move toward increasing coordinated use of GIS web services for application development and personnel utilization. DNRC has also continued development of a fire situational awareness app, the Sage Grouse app, a Timber Cruising app, and an Urban Forestry app, among others, and continues to develop coordinated spatial data storage repositories for departmental information. DNRC is now focussing on apps that improve program personnel workflows for increased efficiency and effective delivery of government services, including data modeling and analysis capabilities (e.g. timber harvest calculations and future sustainability yields). Pairing of spatial and non-spatial data for improved decision making continues to be developed.
IT Goal 4 Improve efficiency of Water Resource Division IT applications.	DNRC finished Water adjudication scanning and is working with SITSD to move to the new ECM solution. A new dam emergency action plan system is scheduled to go live Dec 2016; the Water Rights system was analyzed by a consultant for business objectives and an upgrade plan developed, pilot of phase 1 is in draft; the contact system has a SQL Server database; and a comprehensive State Water Plan GIS system was built and deployed.
IT Goal 5 Improve central applications for managing Contracts, Grants, Loans, Restoration Projects and other systems used to manage DNRC resources.	Primarily postponed. Limited improvements on programs using the WebGrants system.
IT Goal 6 Enhance the Trust Lands Management System (TLMS).	TLMS has had an internal needs assessment conducted and an RFI release to garner ideas for the necessary upgrade. A DP is submitted for industry expert services to format direction and plan, including enhanced mobile development support.
IT Goal 7 Enhance a variety of applications in support of Trust Land Management Division.	DNRC Office of Information Technology is discouraging the use of storing information on desktop machines, so Obj 7-1 is reformed to encourage centralized data storage. Obj 7-2 to develop a geospatial right-of-way database is in preliminary planning stages.

IT Goal 8 Update and improve applications critical to operations of Forestry Division.	The program upgraded off of Lotus approach to current supported systems. The fire mapper was deployed in a basic functionality to program mobile devices for field use.
IT Goal 9 Improve public access to Conservation and Resource Development Division (CARDD) program information.	Programs have been added to the online WebGrants system, most notably the Sage Grouse Conservation Grants program. An interactive GIS map tracking grants is in the scoping stages along with an ugrade to the 310 database application. The CARDD website was upgraded within the broader scope of the departmental website overhaul. Limited resouces prohibited more progress on IT Goal 9.
IT Goal 10 Update and improve applications critical to operations of the Board of Oil and Gas Conservation.	The Board of Oil & Gas were migrated & upgraded to current hardware and software versions with some improved features.

Section 2: An assessment of progress made toward implementing the Agency IT Plan (MCA 2-17-524(3)(b)).
- Please detail progress made toward completing IT projects identified under section 11 of your 2014 Agency IT Plan.
  - Your Agency plan can be found in your Agency folder located at https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.
- Please include project cost, schedule and completion information.

ITEM	DESCRIPTION	ACTUAL AS OF JUNE 30, 2016
Project Name	Water Rights Information System (WRIS) Sustainability Project	
Agency / Division	DNRC/Water Resources Division	

Project / Program purpose and objectives	The WRIS is a critical computer system that is used primarily by the Department of Natural Resources and Conservation (DNRC), the Montana Water Court within the Judicial Branch, and the public as the authoritative source of digital information concerning water rights across the State of Montana. The WRIS is currently being supported by technology that was developed in the late 1990s and deployed at DNRC in the early 2000s. The technology is nearing its end of life from the vendor and the costs of continuing to use it are increasing every fiscal year. In order to support the legislatively mandated record keeping system of the water rights of the citizens of the state, DNRC needs to upgrade the WRIS to a newer technology that will meet current and future business requirements, allow DNRC to move forward with its strategic information technology goals with the WRIS, and ensure that the WRIS lifecycle is sustainable for at least another 8 years. The discovery phase will include updating and verifying the business processes and requirements used by the different stakeholders, research and identify information technology systems that can support identified requirements, and complete a proof of concept/pilot to verify the technology works as described and will be able to support WRIS. The Water Resources Division (WRD) will also pursue development of an online system designed to simplify and improve the efficiency of the water measurement reporting process for both the public and department. Water right holders who have water measurement requirements placed on their water rights are currently required to fill out and detail on paper exactly how they have measured their water usage throughout the year according to the terms of the specific water measurement requirement. This information is then physically mailed to the department who in turn manually enters the information submitted into the water rights database. Migrating to an online, automated electronic process in which water measurement data is entered directly by the water right holder will improve efficiency and reduce the likelihood of data entry errors.	
Estimated start date	1-Jul-15	Sep-15
Estimated cost	50,000/year for two years	
Funding source – 1	Proposed - General Fund (01100) - $63,000/year for two years	0
Funding source – 2	Water Rights Appropriation (02430) - $7,000/year for two years	$49,940
Funding source – 3		
Annual costs upon completion		
Status of the project as of June 30, 2016. Indicate % completed and status of funds expended.	The WRIS current business needs for today and into the future were assessed by an industry consulting firm in the spring of 2016. A road map of how to migrate to the proposed solution was delivered to DNRC in June, along with cost estimates for implementation of a multi-phase project. The pilot phase/proof of concept for the proposed solution is slated for a separate endeavor in FY 2017 with the second year of these monies. The RFP for this project is currently in draft. $70,000 of 02430 funding remains.	

Section 3: An inventory of agency information services, equipment and proprietary software (MCA [2-17-524(3)(c)](#)).

To collect data on "information services" and "proprietary software", we are leveraging LDRPS (L10). Our goal is to utilize and maintain LDRPS as the authoritative source for this information.

- Please verify the information in the LDRPS Spreadsheet, making any necessary updates or additions.
- Please email your updated spreadsheet to Dawn Pizzini, subject matter expert, at dpizzini@mt.gov.
    - The LDRPS spreadsheet can be found in your Agency folder located at https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.
    - We will pull a final LDRPS Spreadsheet for submission as part of the Biennial Report based on your Agency's input.

For "equipment", we are utilizing the standard Agency Inventory Template Spreadsheet we have used for past biennial reporting and that we are currently using to gather information for the IT Convergence project. The spreadsheet can be found in your Agency folder located at https://ent-sp1.mt.gov/sites/bienrpt/_layouts/15/start.aspx#/Agency%20Information/Forms/AllItems.aspx.

- If you **have** already provided your inventory for the IT Convergence project, please fill out the last tab labeled **DEVICES**.
    - Please review the entire workbook for accuracy and make any necessary changes.
- If you **have not** provided this inventory, please fill out the entire workbook.

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Questions can be directed to:

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